

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application.

**COMPLETE LISTING OF THE CLAIMS:**

Claims 1-35 : (Canceled)

Claim 36 : (New) A telecommunications system, comprising: one or more nodes; a plurality of telephone exchanges, two of which are arranged to communicate traffic with each other via the one or more nodes; wherein communication via the one or more nodes is in a packetized form of packets; wherein the one or more nodes comprise routers; wherein communication via one or more of the routers uses internet protocol (IP) for the traffic; and an adapter including means for converting the traffic from the packetized form to a non-packetized form.

Claim 37 : (New) The telecommunications system of claim 36, wherein at least some of the telephone exchanges arranged to communicate with each other via the one or more nodes are trunk exchanges.

Claim 38 : (New) The telecommunications system of claim 36, wherein at least some of the telephone exchanges arranged to communicate with each other via the one or more nodes are local exchanges.

Claim 39 : (New) The telecommunications system of claim 36, wherein the communication includes telephone calls; and wherein all call handling in the system takes place outside of the one or more nodes.

Claim 40 : (New) The telecommunications system of claim 37, wherein each of the trunk exchanges has a direct link to each of the one or more nodes.

Claim 41 : (New) The telecommunications system of claim 38, wherein at least some of the telephone exchanges are trunk exchanges; and wherein communication between the local exchanges and the trunk exchanges uses asynchronous transfer mode (ATM).

Claim 42 : (New) The telecommunications system of claim 36, wherein each of the two or more telephone exchanges comprises routing data relating to communication with all other exchanges in the telecommunications system; and wherein the routing data is partially or wholly enabled.

Claim 43 : (New) The telecommunications system of claim 42, wherein only that part of the routing data in a particular exchange relating to communication between that exchange and other exchanges with which that exchange is arranged to communicate via the one or more nodes is enabled.

Claim 44 : (New) The telecommunications system of claim 36, comprising means for carrying voice traffic as asynchronous transfer mode (ATM) Adaptation Layer 1 (AAL1) or ATM Adaptation Layer 2 (AAL2).

Claim 45 : (New) The telecommunications system of claim 36, comprising means for carrying voice traffic as voice over IP (VoIP).

Claim 46 : (New) The telecommunications system of claim 36, wherein the adapter includes means for providing interworking between synchronous transfer mode (STM) and IP domains.

Claim 47 : (New) The telecommunications system of claim 46, wherein the adapter includes means for detection of modem traffic.

Claim 48 : (New) The telecommunications system of claim 47, wherein the adapter includes means for converting a detected modem signal to baseband data for packetization into IP.

Claim 49 : (New) The telecommunications system of claim 36, wherein the traffic to be packetized comprises public switched telephone network (PSTN) circuits, and wherein the adapter is arranged to only packetize active PSTN circuits.

Claim 50 : (New) The telecommunications system of claim 49, wherein the adapter includes means to communicate information on which PSTN circuits are not packetized using spare capacity within an IP logical route.

Claim 51 : (New) The telecommunications system of claim 36, wherein the adapter includes means for compression of voice traffic.